

Remarks

Applicants respectfully request reconsideration of the present U.S. Patent application as amended herein. Claims 1, 11, 21 and 28 have been amended. No claims have been added or canceled. Thus, claims 1-35 are pending.

CLAIM REJECTIONS – 35 U.S.C. § 102(e)

Claims 1-3, 7, 8, 10 and 11-35 were rejected as being anticipated by U.S. Patent Publication No. 2005/0125580 of *Madukkarumukmana, et al. (Madukkarumukmana)*. For at least the reasons set forth below Applicants submit that claims 1-3, 7, 8, 10 and 11-35 are not anticipated by *Madukkarumukmana*.

Claim 1 recites:

receiving an interrupt message from a device via a shared interrupt interface, wherein the device supports a plurality of operating entities;

checking one or more status registers associated with the shared interrupt interface to identify the device; and

transmitting an indication of the interrupt message to one or more selected operating entities associated with the identified device, wherein the selected operating entities comprise a subset of the plurality of operating entities.

Thus, Applicants claim identifying a device providing an interrupt received via a shared interrupt interface using a status register associated with the shared interrupt interface and transmitting an indication of the interrupt message to a subset of operating entities associated with the identified device. Claims 11 and 28 recite similar limitations.

In contrast, *Madukkarumukmana* discloses the interrupt generating device indicating the virtual machine to receive the interrupt. See Paragraph 0031. Specifically, *Madukkarumukmana* discloses:

Block 120 illustrates that an interrupt may be received by the entity responsible for interrupt steering. Block 130 illustrates that the interrupt may be checked to determine if it specifies (directly or indirectly) to steer interrupts based on VM locality information and if it contains or is associated with a particular VM-ID. In one embodiment, the interrupt generating device may encode the VM-ID as part of the interrupt message. In another embodiment, the IO hub may associate any interrupts generated by a particular device (or set of devices in an assigned partition of the IO-subsystem) as being associated with a particular VM-ID.

See paragraph 0024. *Madukkarumukmana* further discloses:

Block 150 illustrates that, if the interrupt specifies steering based on VM locality and is associated with a VM-ID, it may be determined if the VM-ID is currently associated with one or more processors, which in turn indicates the target VM's processor locality. In one embodiment, the VM-ID may be associated with multiple processors if that VM is simultaneously running on multiple processors, for example on a SMP operating system. In one embodiment, the association may be determined by looking up the VM-ID in a participant table or equivalent structure that correlates processors with their currently executing VMs.

See paragraph 0026. Thus, *Madukkarumukmana* does not disclose checking a status register of a shared interrupt interface to identify a device. Accordingly, *Madukkarumukmana* cannot anticipate the invention as claimed in claims 1, 11 and 28.

Claims 2, 3, 7, 8 and 10 depend from claim 1. Claims 12-20 depend from claim 11. Claims 29-25 depend from claim 28. Because dependent claims include the limitations of the claims from which they depend, Applicants submit that claims 2, 3, 7, 8, 10, 12-20 and 29-35 are not anticipated by *Madukkarumukmana* for at least the reasons set forth above.

Claim 21 recites:

a host monitor communicatively coupled with the plurality of virtual machines and coupled to receive an interrupt signal via a shared interrupt interface having one or more associated status registers, wherein the host monitor reads a value stored in one or more of the status registers corresponding to devices that asserted the interrupt signal to identify the device, and further wherein the host monitor selectively invokes an

interrupt service signal to each of the plurality of virtual machines associated with the device asserting the interrupt signal.

Thus, Applicants claim reading a value from one or more status registers to identify the device generating the interrupt. As discussed above, *Madukkarumukmana* does not disclose reading a value from a status register to determine the identity of the device generating the interrupt. Therefore, *Madukkarumukmana* does not anticipate the invention as claimed in claim 21.

Claims 22-27 depend from claim 21. Because dependent claims include the limitations of the claims from which they depend, Applicants submit that claims 22-27 are not anticipated by *Madukkarumukmana* for at least the reasons set forth above.

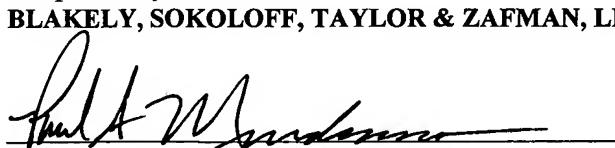
CONCLUSION

For at least the foregoing reasons, Applicants submit that the rejections have been overcome. Therefore, claims 1-35 are in condition for allowance and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application.

Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
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